

DATA SHEET

A0801

ABB Ability™ System 800xA® hardware selector



The AO801 Analog Output Module has 8 unipolar analog output channels. The module performs selfdiagnostic cyclically. A low internal power supply sets the module in INIT state (no signal from the module).

Features and benefits

- 8 channels of 0...20 mA, 4...20 mA outputs
- OSP sets outputs to predetermined state upon error detection
- Analog Output is to be short circuit secured to ZP or +24 V
- Process and power connection via detachable connectors

General info		
Article number	3BSE020514R1	
Туре	Analog Output	
Signal specification	0 20 mA, 420 mA	
Number of channels	8	
Signal type	Unipolar single ended	
HART	No	
SOE	No	
Redundancy	No	
High integrity	No	
Intrinsic safety	No	
Mechanics	S800L	

Detailed data		
Resolution	12 bit	
Isolation	Groupwise isolated from ground	
Under/over range	-/+15%	
Output load	Max 850 Ω	
Error	0,1 %	
Temperature drift	Typ 30 ppm/°C, Max 50 ppm/°C	
Rise Time	10 μs	
Update cycle time	1 ms	
Current limiting	Short circuit proof current limited output	
Maximum field cable length	600 meters (656 yards)	
Rated insulation voltage	50 V	
Dielectric test voltage	500 V a.c.	
Power dissipation	3.8 W	
Current consumption +5 V Modulebus	70 mA	
Current consumption +24 V Modulebus	-	
Current consumption +24 V external	200 mA	
Supported wire size	Solid: 0.05-2.5 mm², 30-12 AWG Stranded: 0.05-1.5 mm², 30-12 AWG Recommended torque: 0.5-0.6 Nm Stripping length 6-7.5mm, 0.24-0.30 inch	

Diagnostics		
Front LED's	S(tatus) (run or fault)	
Status indication of supervision	Module Error, Module Warning, Channel error	

Environment and certification		
CE mark	Yes	
Electrical safety	EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201	
Hazardous Location	C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2	
Marine certification	ABS, BV, DNV, LR	
Temperature, Operating	0 to +55 °C (+32 to +131 °F), approvals are issued for +5 to +55 °C	
Temperature, Storage	-40 to +70 °C (-40 to +158 °F)	
Pollution degree	Degree 2, IEC 60664-1	
Corrosion protection	ISA-S71.04: G3	
Relative humidity	5 to 95 %, non-condensing	
Max ambient temperature	55 °C (131 °F), for vertical mounting 40 °C (104 °F)	
Protection class	IP20 according to IEC 60529	
Mechanical operating conditions	IEC/EN 61131-2	
EMC	EN 61000-6-4 and EN 61000-6-2	
Overvoltage categories	IEC/EN 60664-1, EN 50178	
Equipment class	Class I according to IEC 61140; (earth protected)	
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)	
WEEE compliance	DIRECTIVE/2012/19/EU	

Dimensions		
Width	86.1 mm (3.4")	
Depth	58.5 mm (2.3")	
Height	110 mm (4.33")	
Weight	0.24 kg (0.53 lbs.)	



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